

FIG. 1

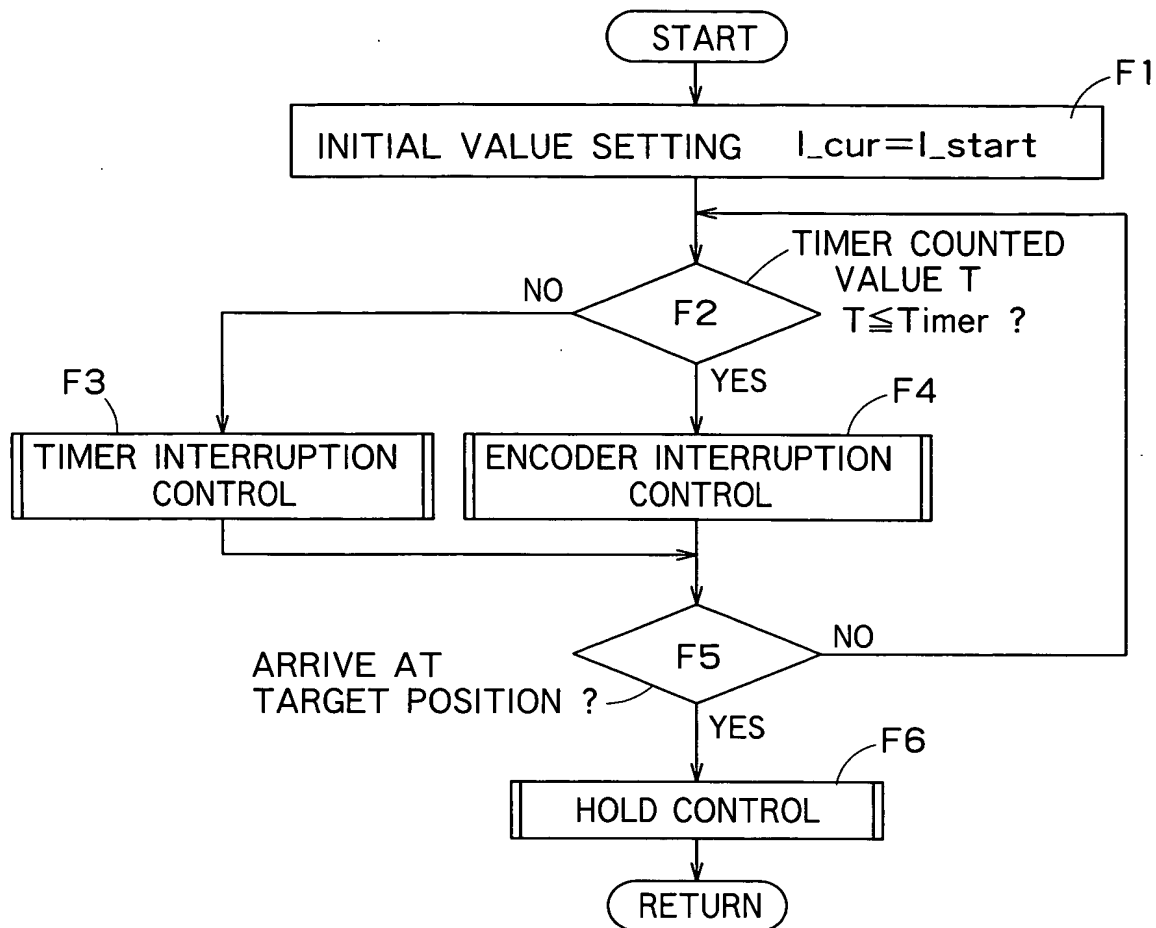


FIG. 2

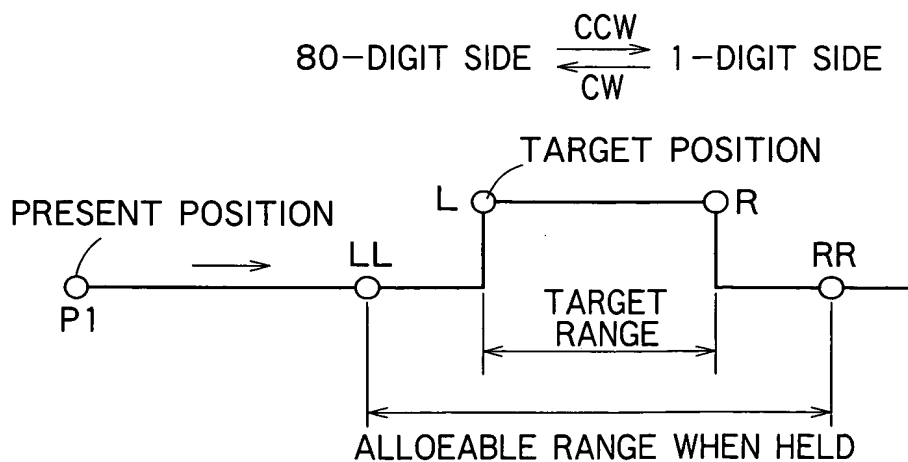


FIG. 3

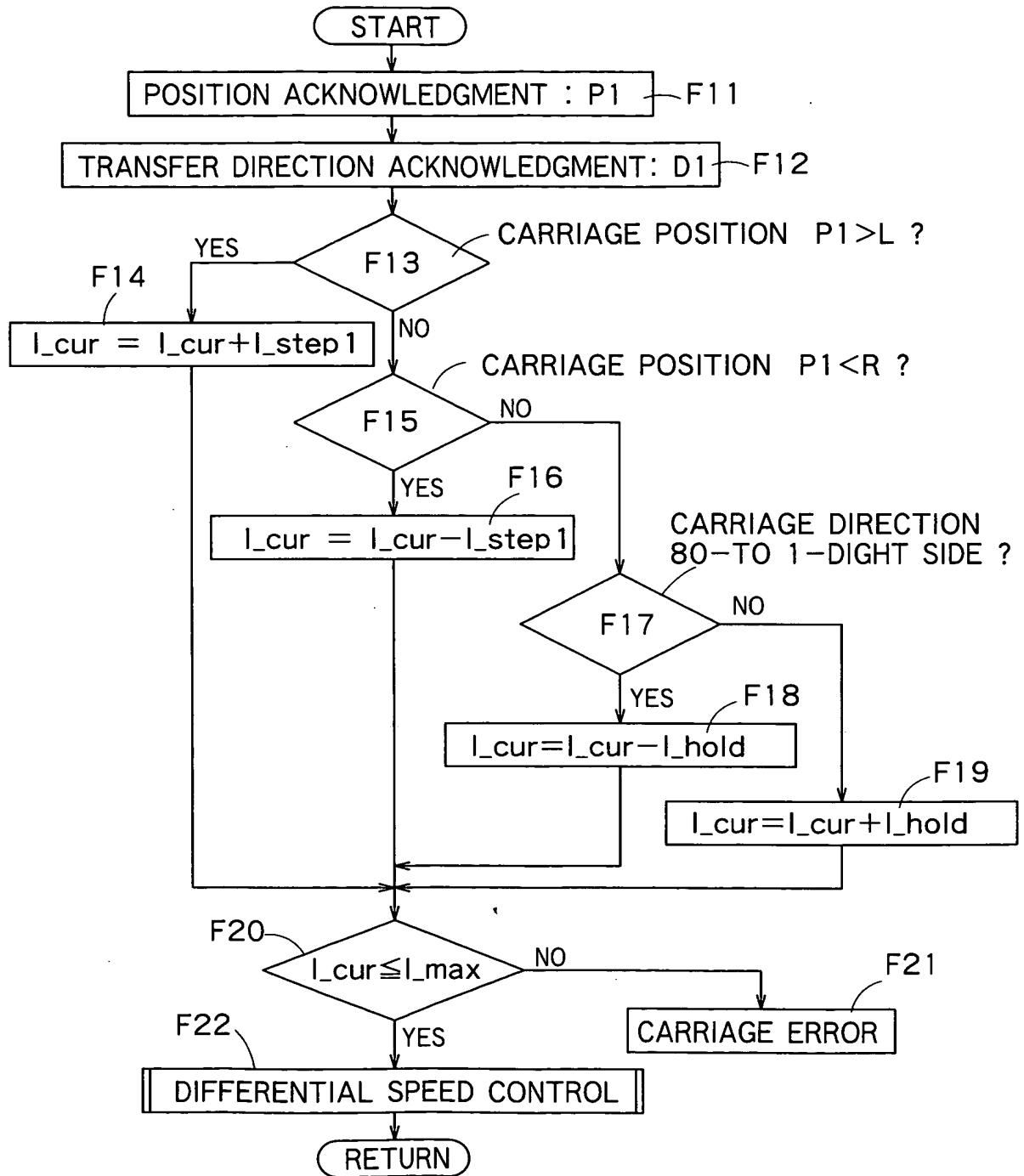
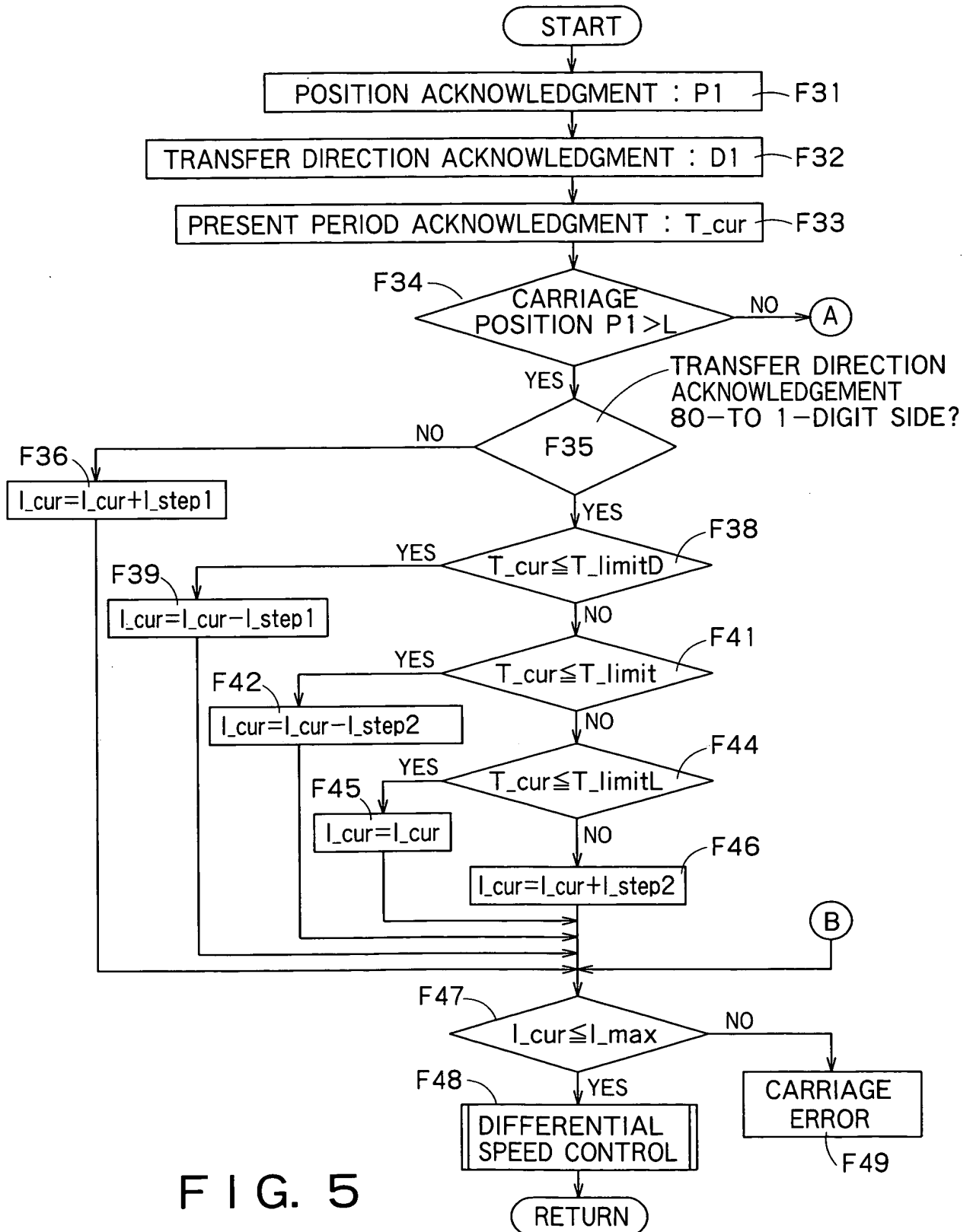
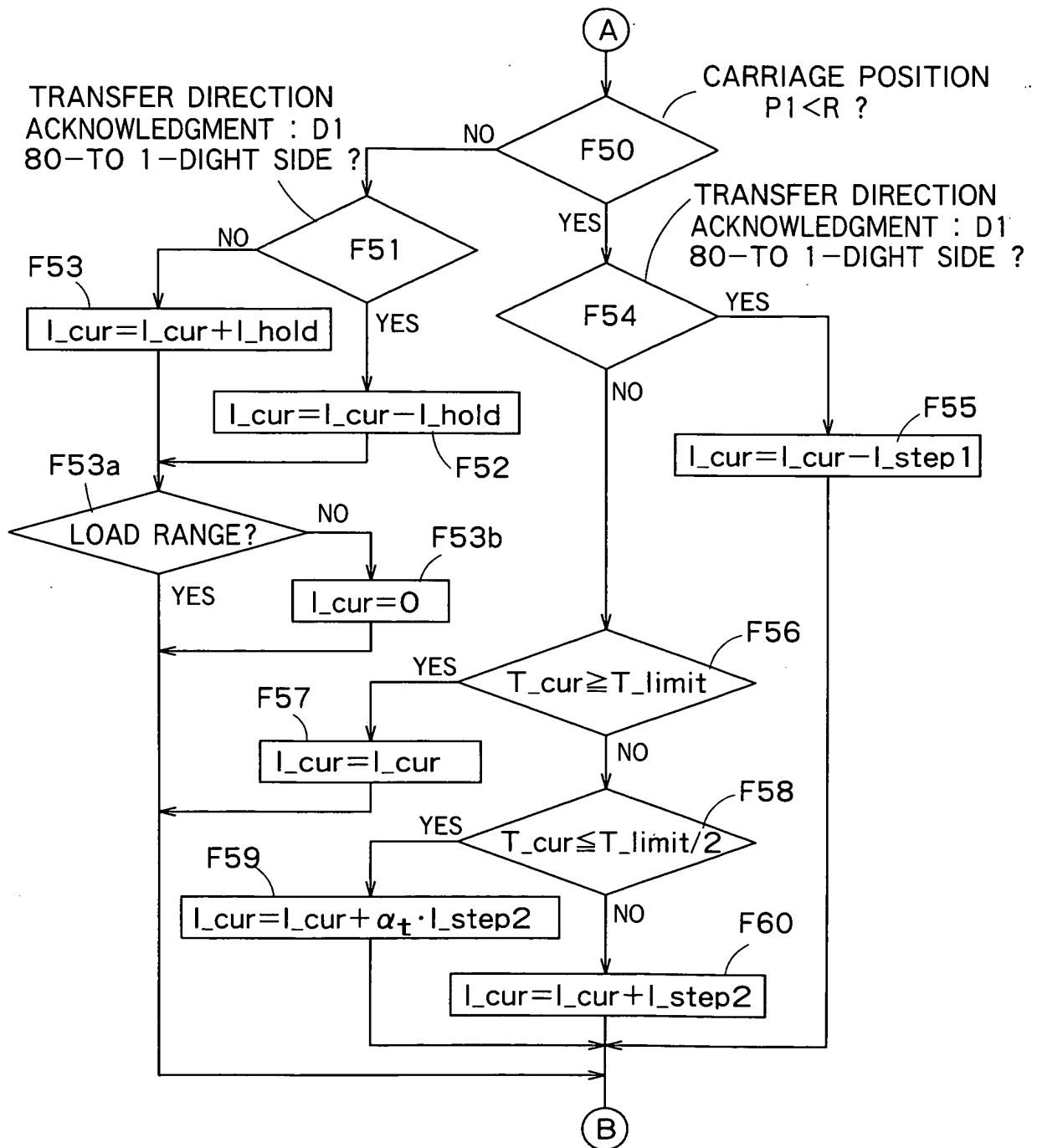


FIG. 4





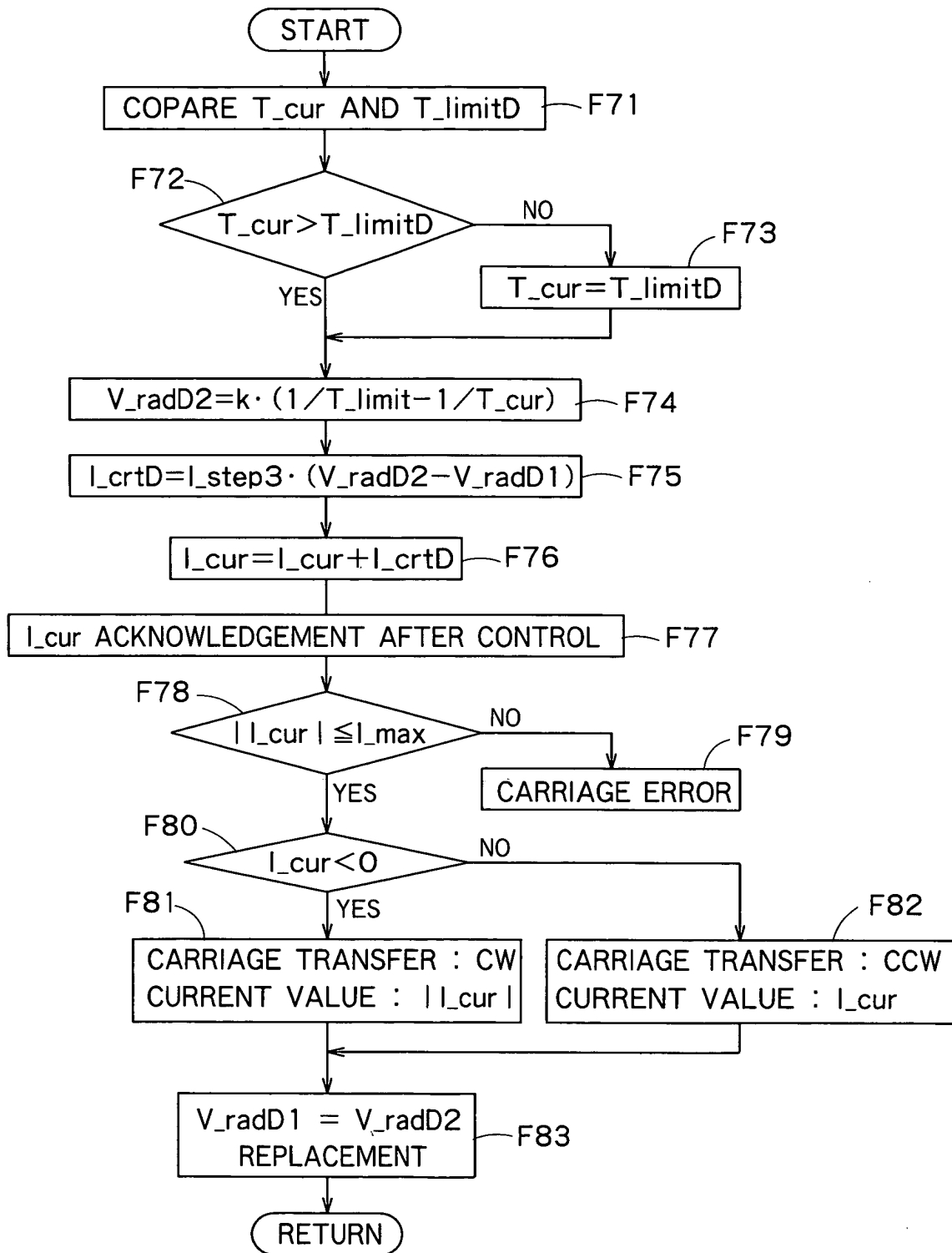


FIG. 7

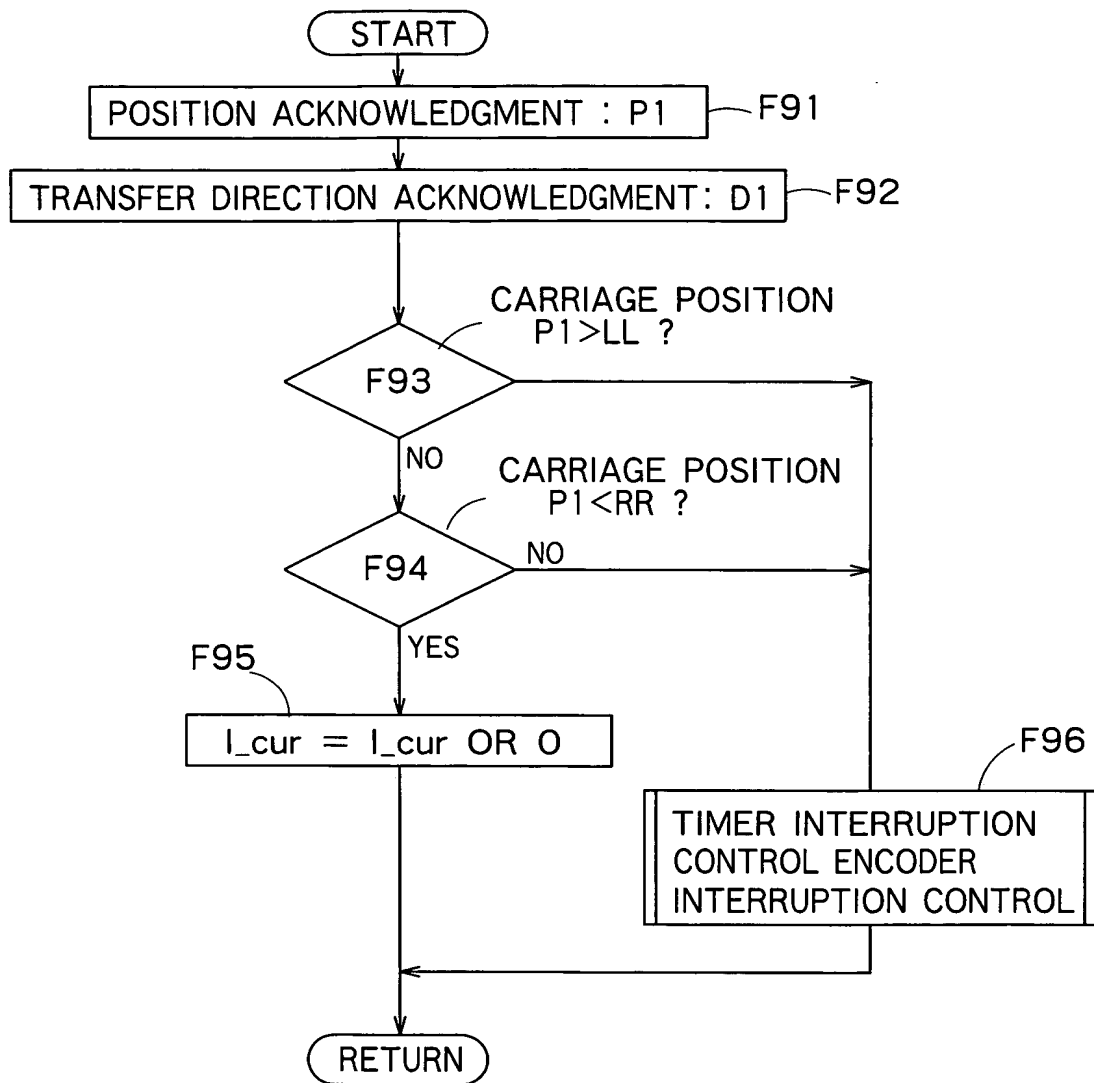


FIG. 8

SPEED	TARGET SPEED [cps]	OPERATION	TIMER [ $\mu$ s]	T_limitL [ $\mu$ s]	T_limit [ $\mu$ s]	T_limitD	I_step1 [mA]	I_step2 [mA]	I_step3 [mA]	I_hold [mA]	I_start [mA]	I_max [mA]
CREEP- ING	a <sub>v1</sub>	LOGICAL SEEK	b <sub>Tm1</sub>	b <sub>TL1</sub>	b <sub>T1</sub>	b <sub>TD1</sub>	c <sub>11</sub>	c <sub>21</sub>	c <sub>31</sub>	c <sub>f1</sub>	c <sub>s1</sub>	c <sub>m1</sub>
NORMAL	a <sub>v2</sub>	RUBBING	b <sub>Tm2</sub>	b <sub>TL2</sub>	b <sub>T2</sub>	b <sub>TD2</sub>	c <sub>12</sub>	c <sub>22</sub>	c <sub>32</sub>	c <sub>f2</sub>	c <sub>s2</sub>	c <sub>m2</sub>
HIGH	a <sub>v3</sub>	WIPING	b <sub>Tm3</sub>	b <sub>TL3</sub>	b <sub>T3</sub>	b <sub>TD3</sub>	c <sub>13</sub>	c <sub>23</sub>	c <sub>33</sub>	c <sub>f3</sub>	c <sub>s3</sub>	c <sub>m3</sub>

9  
G  
F

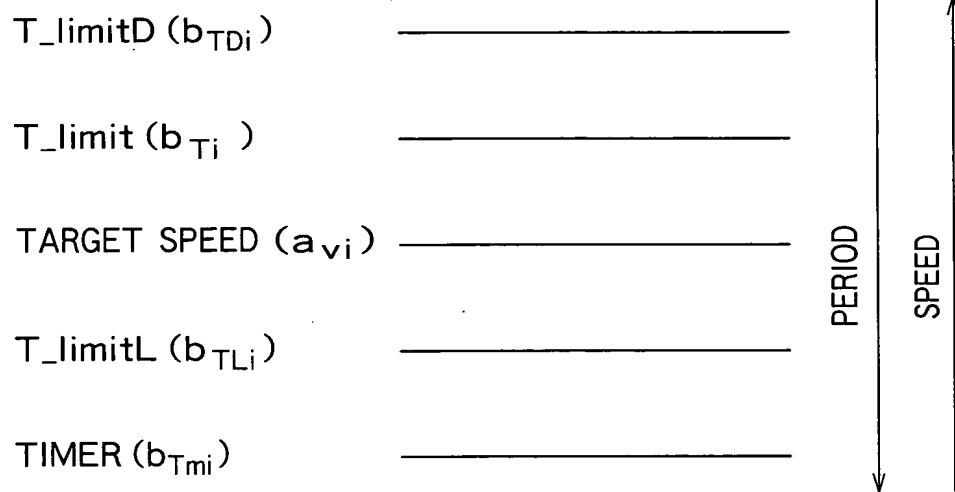


FIG. 10

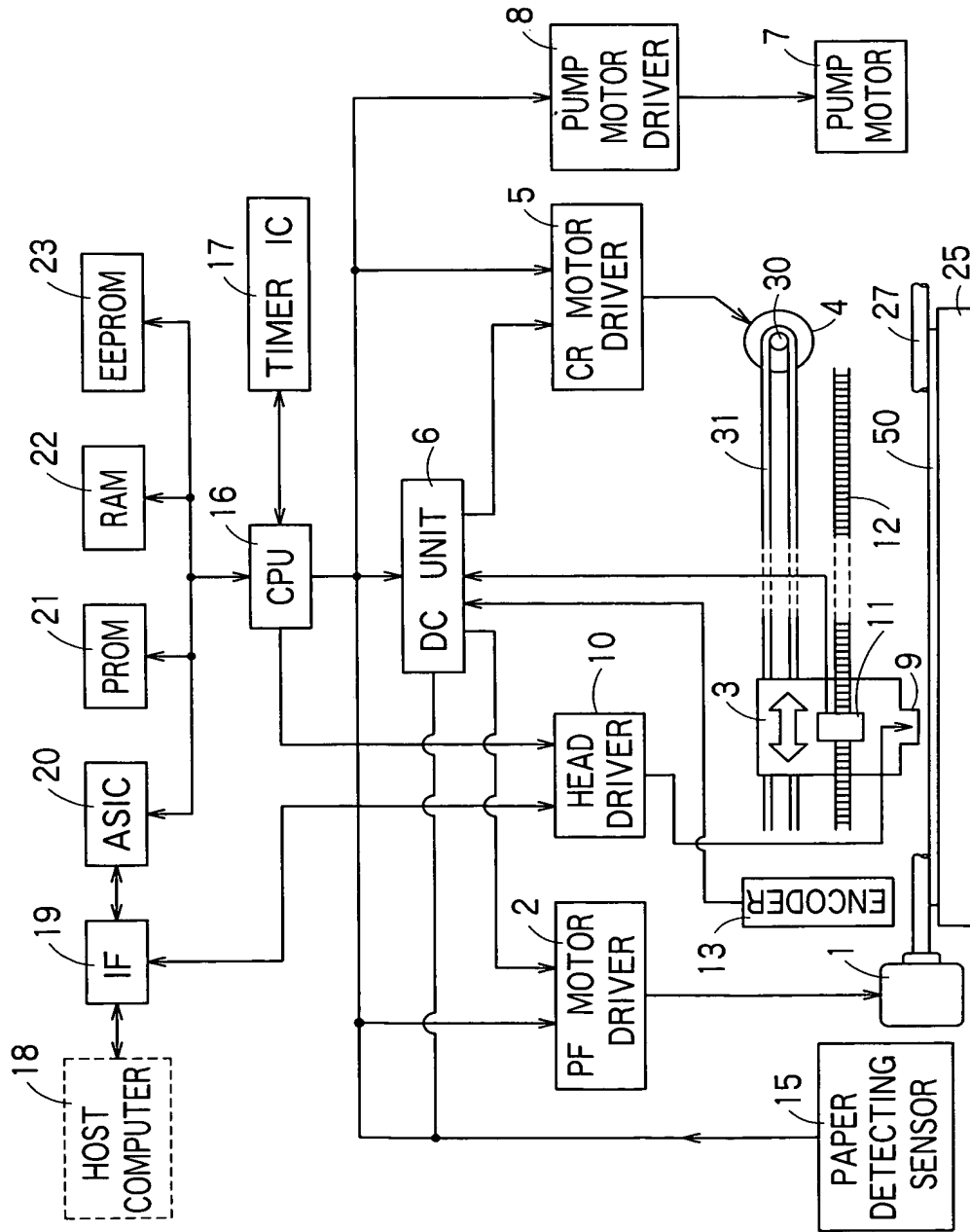


FIG. 11

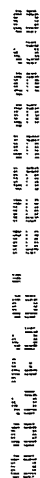


FIG. 12

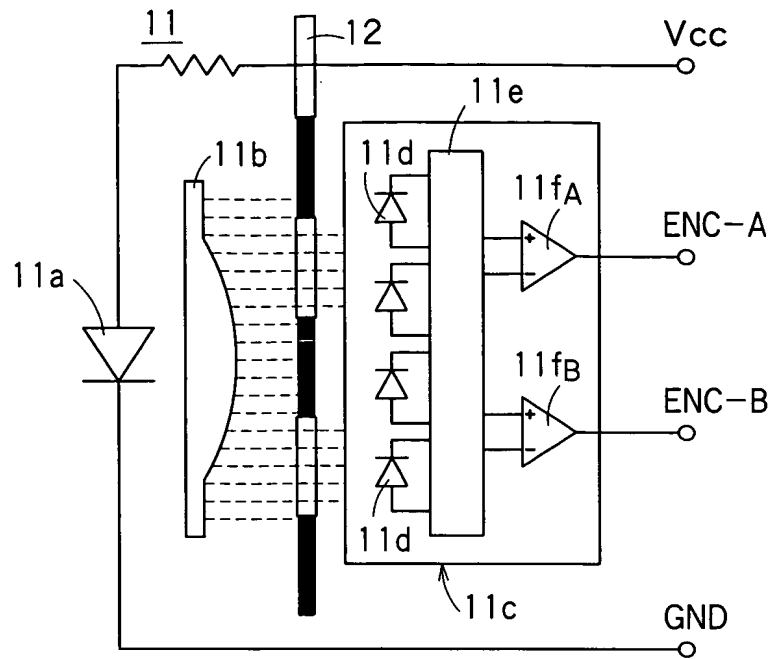


FIG. 13

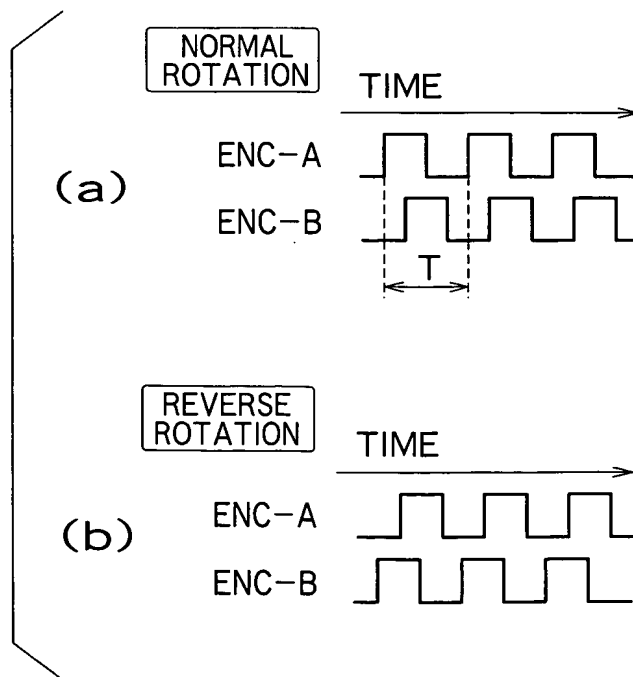


FIG. 14

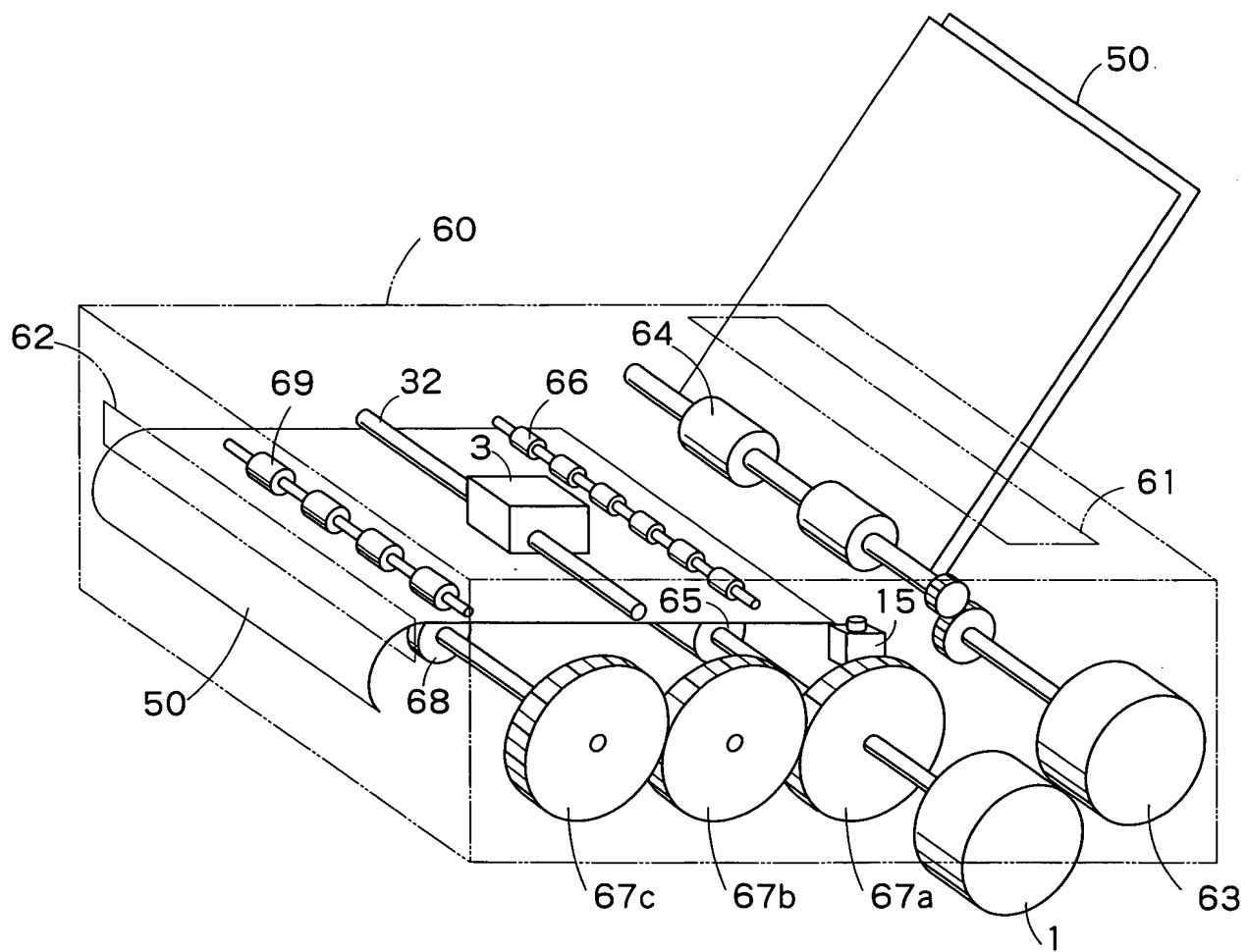


FIG. 15

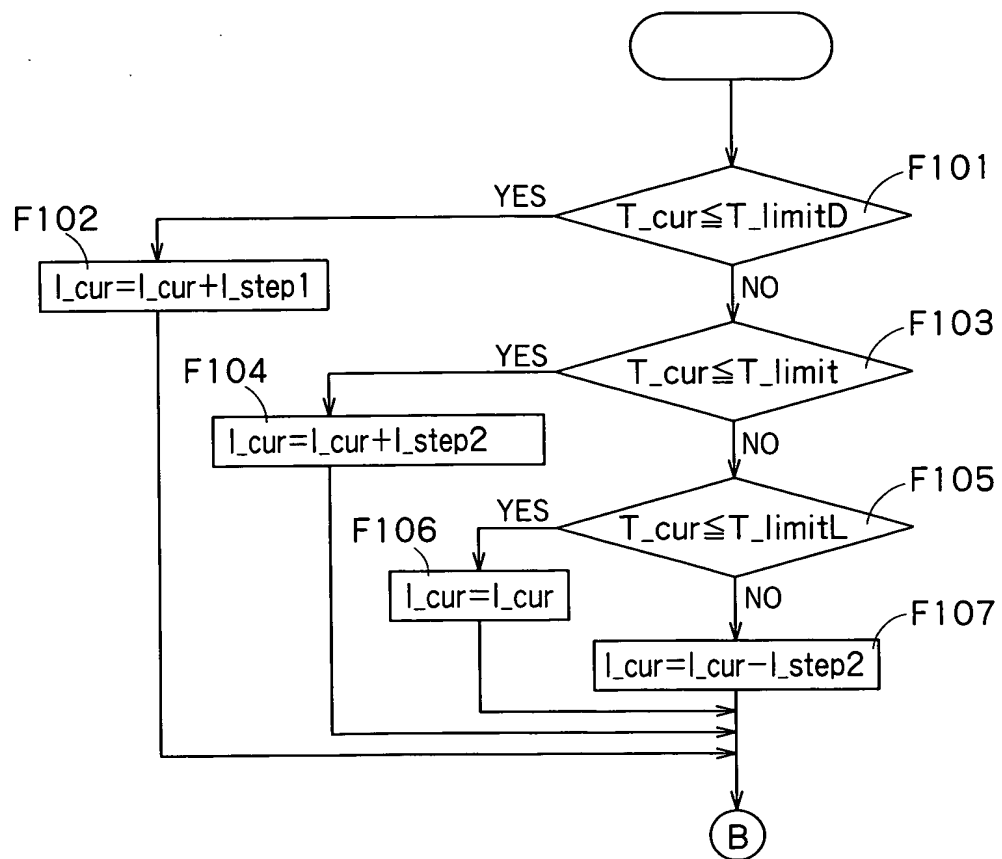


FIG. 16

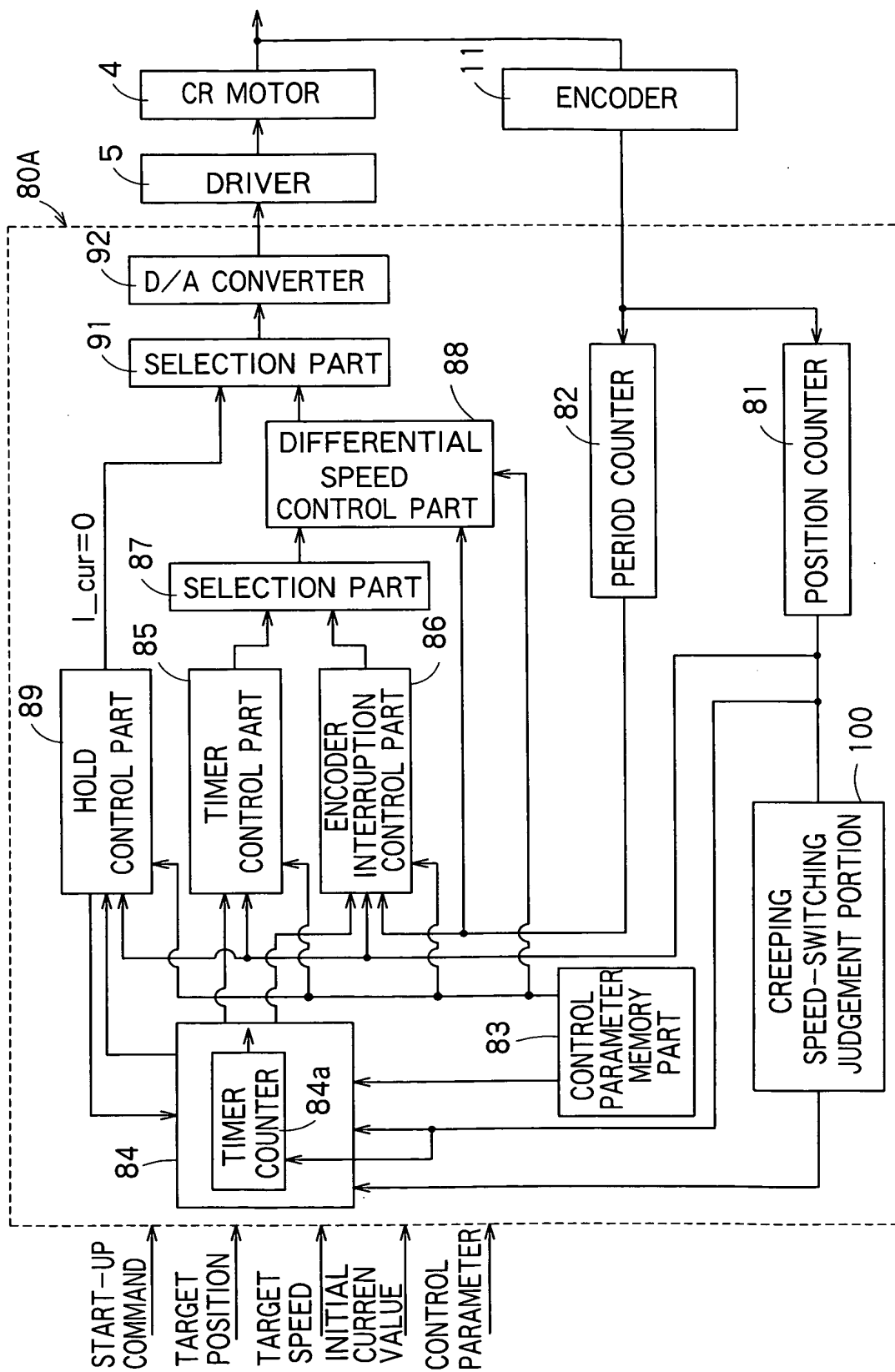


FIG. 17

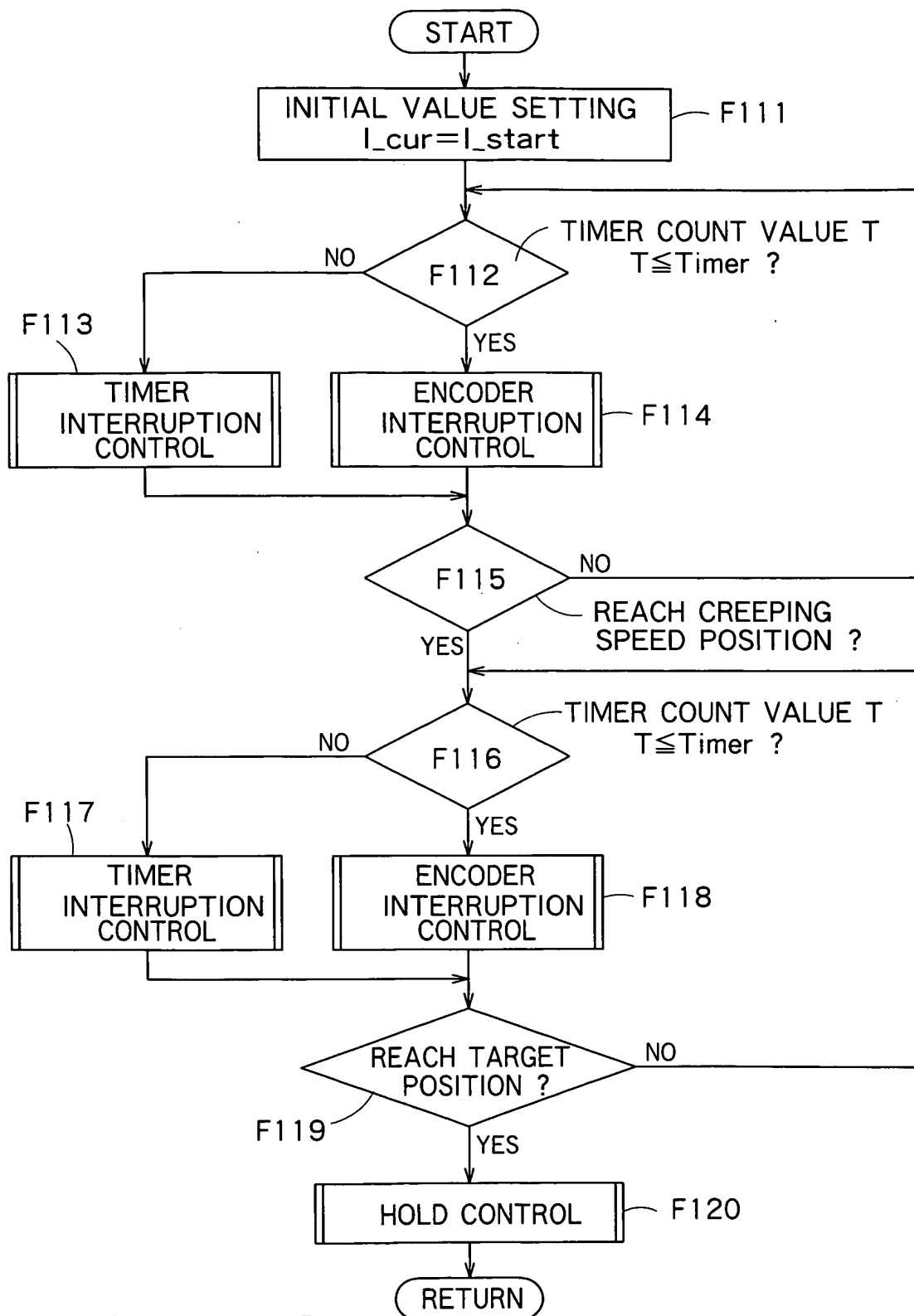


FIG. 18

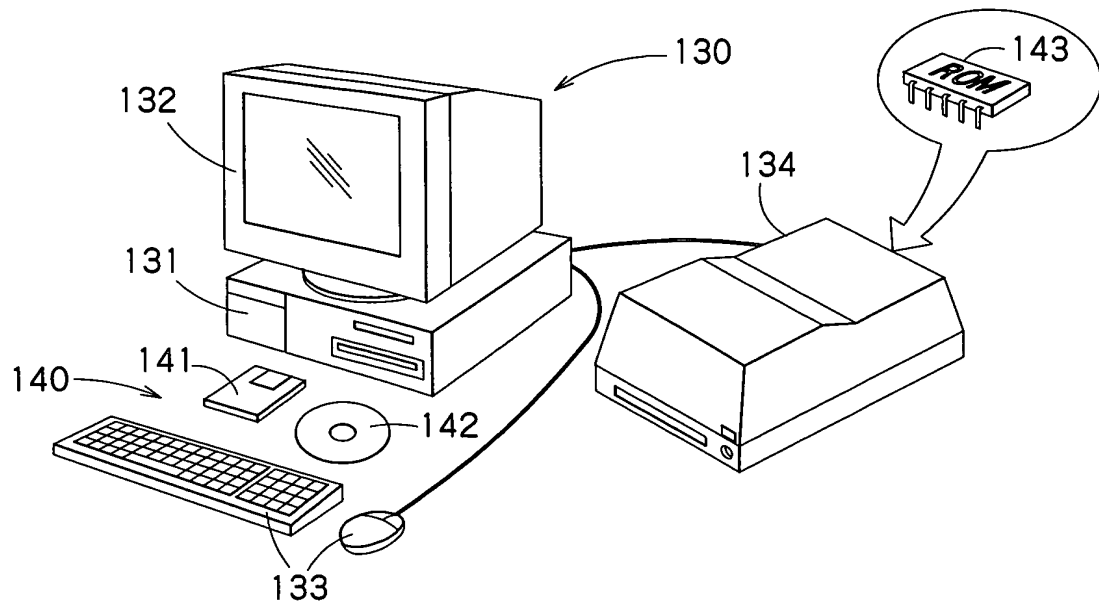


FIG. 19

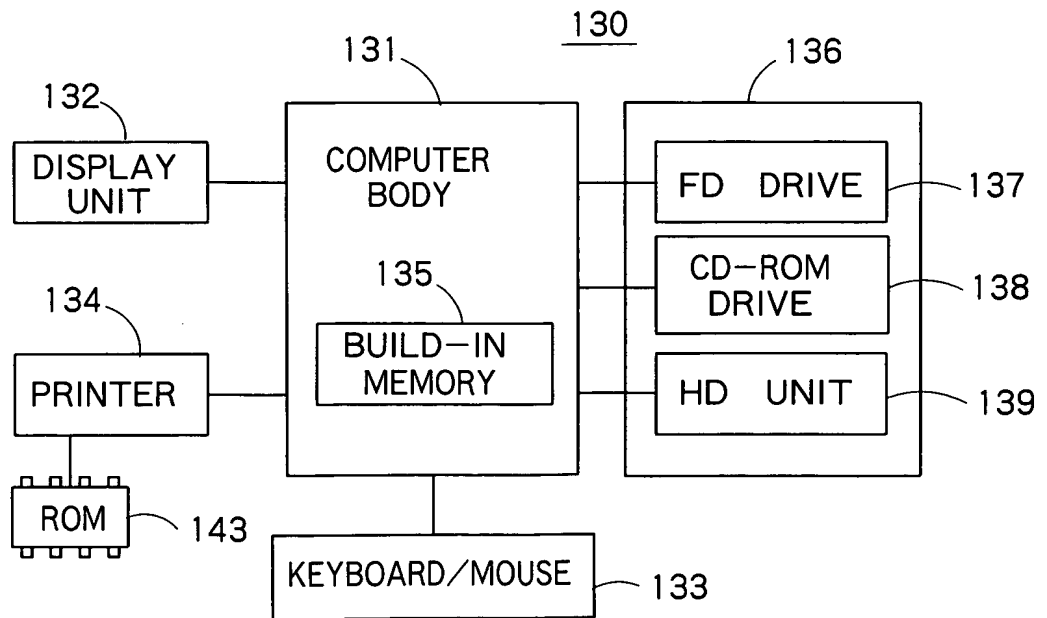


FIG. 20

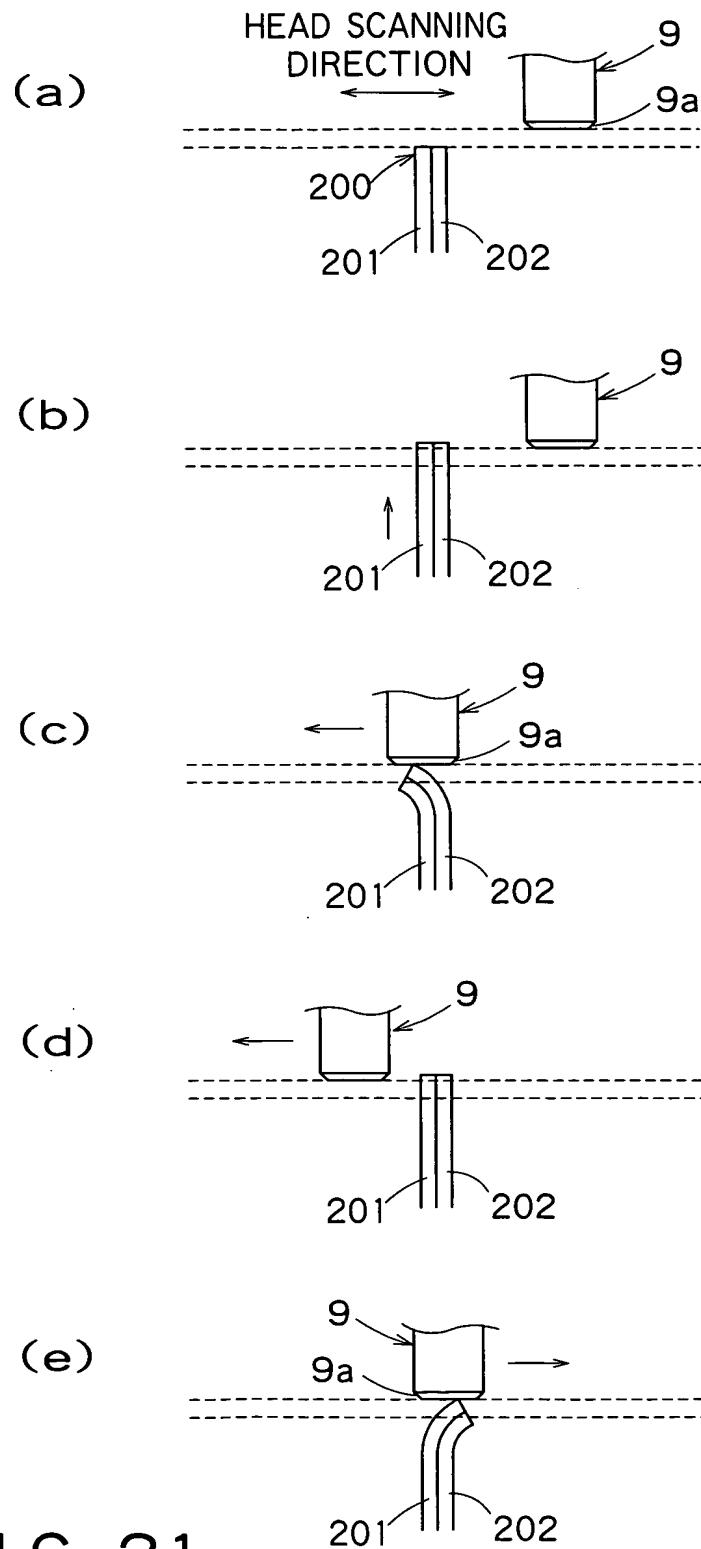


FIG. 21